

STRATEGY TO CONTROL A CLUTCH TO CONNECT AN ENGINE TO A POWERTRAIN OF A HYBRID ELECTRIC VEHICLE

Abstract of Disclosure

This invention is a control system for a clutch for connecting an engine to the powertrain of an HEV. The system includes a controller programmed to determine a filtered speed error of the engine and a starter/motor and to determine an engine run command. Monitoring devices operatively connected to the engine and the starter/motor are connected to output data representing the engine and starter/motor speeds to the controller. The controller is programmed to generate a clutch position command, dependent on the data, to a servo-actuator connected to the clutch. The invention, further, provides methods for controlling such a clutch including the steps of determining an engine run command, determining a filtered speed error of the engine and a starter/motor and generating a clutch position command.

Figures